

REMARKS/ARGUMENTS

The Examiner has maintained the Requirement for Restriction.

However, Applicants note that by this amendment, the limitations of claim 36 are now incorporated into claim 1, and request withdrawal of the Requirement for Restriction between Groups I and III, as the claims now include the same operation, and examination of both groups of claims would not involve a burden on the examiner. Claims of Groups I and III stand with respect to each other in a situation akin to combination/subcombination, where the patentability of the combination claims relies on the limitations in the subcombination. See MPEP 806.05(c)

Claims 1-23 stand rejected as indefinite with respect to the term "mild denaturation conditions." Claim 1 has now been amended to define these conditions, with the terms used in nonelected claim 36. Applicants respectfully request withdrawal of this rejection.

Claims 1-23 also stand rejected as indefinite in that the term "locus" in claim 1 step (b) lacks antecedent.

Applicants submit that "locus", meaning "place" is an inherent property of a thing, such as an antibody or a group of antibodies, and that the term does not require an antecedent. To state in a claim that the antibodies "have a locus" would be redundant, since all material items inherently have a locus.

Claims 1, 3-16 and 21-23 stand rejected as obvious over Shen et al. in view of Knowles et al. The examiner's position is that Shen et al. disclose all features of the claimed process except the conducting of a mild denaturation of proteins, and Knowles et al. disclose denaturation of proteins in an assay for a single protein using the same denaturation agent. The examiner concludes that the denaturation in Knowles et al. must have been mild since the same agent is used as in the claimed process.

Claim 1 has been amended to include the protein denaturation conditions from original claim 36. These are, in comparison to the conditions of Knowles et al., a lower concentration of sulfate or sulfonate detergent (about 1-10 mM as opposed to 1 - 3 molar), a lower temperature of between about 4 and about 37 °C (as opposed to 50 °C and higher), and for

a time of from about 2 to about 72 hours (as opposed to about 1 minute). As explained in the Specification, the fact that a sulfonate detergent such as SDS can be effectively used for protein denaturation under such comparatively mild conditions is surprising, and the use of the much more extreme conditions of Knowles et al. is detrimental in assays for the simultaneous determination of multiple proteins.

Applicants thus submit that the claims as amended define an invention that is patentable over the cited art, and request withdrawal of this rejection.

Claim 2 is rejected as obvious over the combination of Shen et al. and Knowles et al. with Chin et al. However, Chin et al. does not disclose any denaturation of proteins; accordingly this reference does not overcome the combined shortcomings of Chen et al. and Knowles et al. in that regard.

Claims 17 and 20 are rejected as obvious over the combined teachings of Shen et al. and Knowles et al., together with Bayer. However, Bayer et al., which discusses the avidin-biotin system, also lacks a discussion of protein denaturation, so the distinction of the current claims discussed with respect to the combination of Shen et al. and Knowles et al. applies to this rejection as well.

Claims 18 and 19 are rejected over the combination of Shen et al., Knowles et al. and Bayer et al. further in view of Roser. Again, Roser does not disclose protein denaturation, so fails to fill the gap left by the Shen et al./Knowles et al. combination with respect to claim 1, as now amended.

Applicants request withdrawal of the above rejections for obviousness.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned.

Respectfully submitted,

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